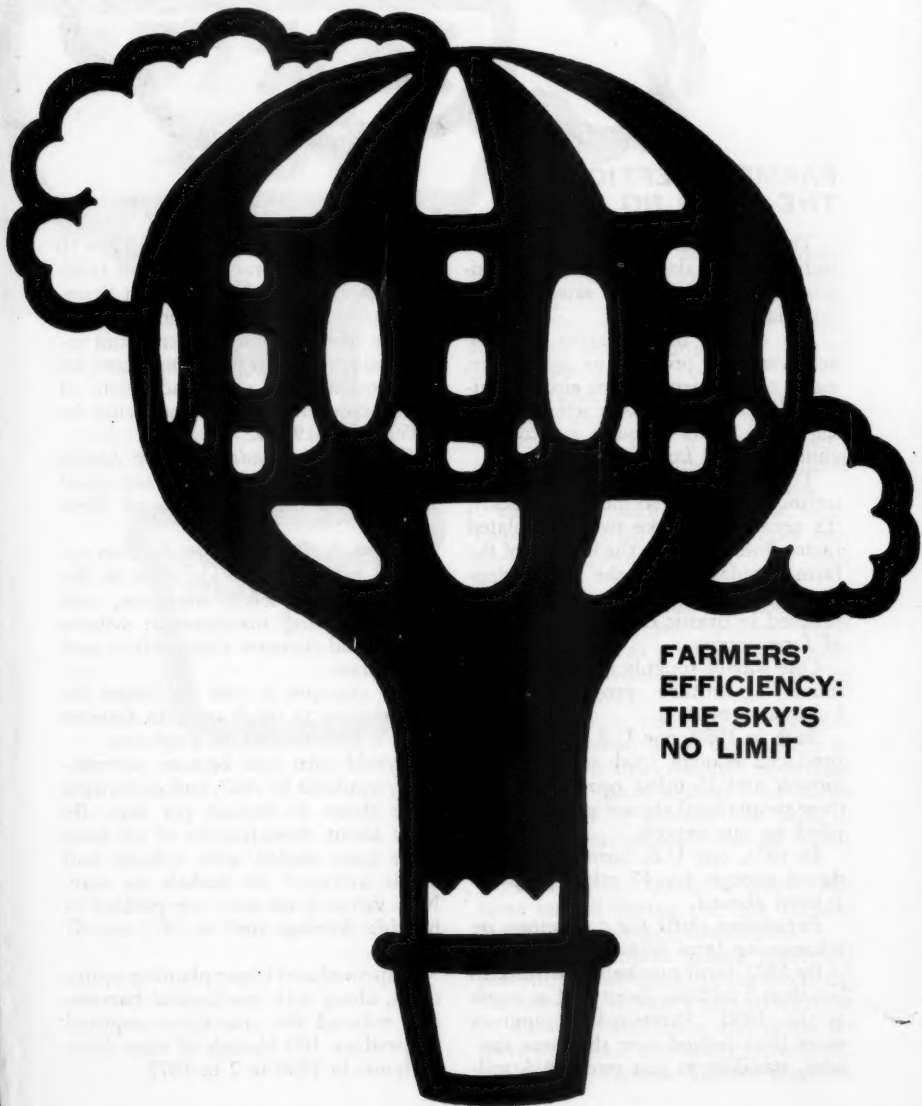


agricultural **SITUATION**

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**FARMERS'
EFFICIENCY:
THE SKY'S
NO LIMIT**



FARMERS' EFFICIENCY: THE SKY'S NO LIMIT

The 1950's and the 1960's saw new technologies make computers our modern-day oracles, space satellites our manmade moons.

But despite the sensation of these achievements, progress in agriculture, man's oldest science, came close to outstripping strides in other sciences during those years—though agricultural gains received far less attention.

To understand why agricultural technology gained so much so quickly, it's necessary to take two interrelated factors into account: the halving of the farm population and the rapid adoption of new ways of doing things which resulted in drastic changes in the mix of farm inputs.

One way of roughly measuring how much agriculture progressed: the headcount method.

Back in 1950, one U.S. farmworker produced enough food and fiber for himself and 15 other people. Two of these people lived abroad and were supplied by our exports.

In 1971, one U.S. farmworker produced enough for 47 other people—7 lived abroad.

Population shifts put a premium on labor-saving farm technology.

By 1971 farm numbers had sunk to less than 3 million, about half as many as in 1950. Farmworker numbers more than halved over the same decades, standing at just under 4½ mil-

lion in 1971, compared with 1950's 10 million. Farm operators and their families generally account for about three-fourths of the farm working force.

The exodus from the farm and increased wage rates were important incentives in the rapid adoption of new labor-saving technology during the 1950's and 1960's.

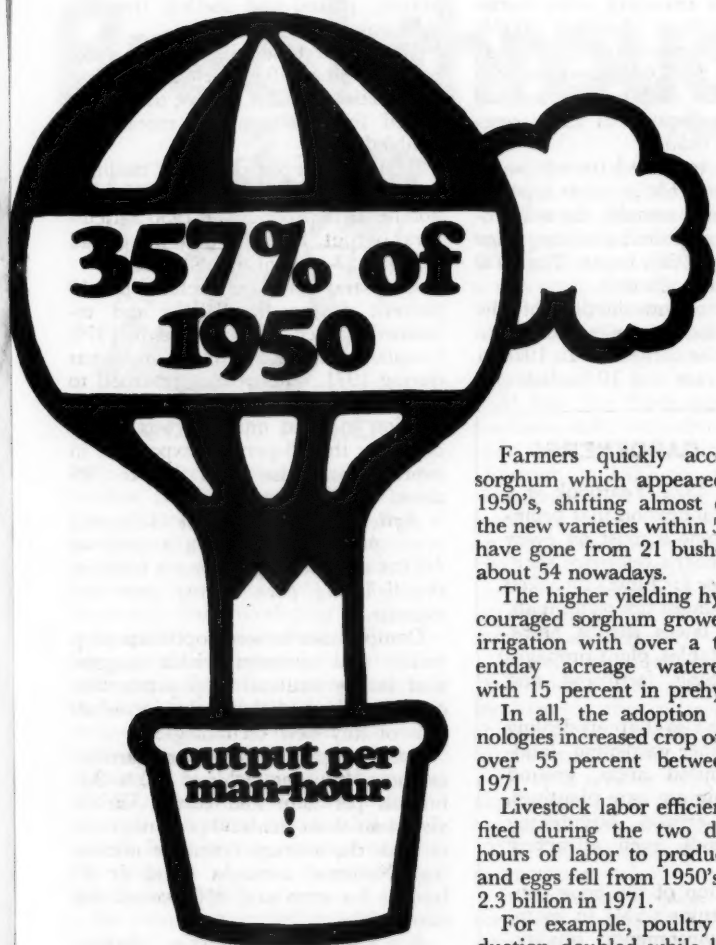
Technological advances are hardly new to U.S. agriculture but the speed with which farmers embraced them was.

In the past two decades farmers accepted far more quickly than in the past the new seeds, machines, and production and management systems that would increase their output and save labor.

For example, it took far longer for hybrid corn to catch on with farmers than it took for hybrid sorghums.

Hybrid corn seed became commercially available in 1933, and yields then were about 23 bushels per acre. By 1950 about three-fourths of all corn acres were seeded with hybrids and yields averaged 38 bushels an acre. Now virtually all acres are planted to hybrids. Average yield in 1971 was 87 bushels.

Improved and larger planting equipment, along with mechanical harvesting, reduced the man-hours required to produce 100 bushels of corn from 40 hours in 1950 to 7 in 1971.



Farmers quickly accepted hybrid sorghum which appeared in the mid-1950's, shifting almost completely to the new varieties within 5 years. Yields have gone from 21 bushels in 1950 to about 54 nowadays.

The higher yielding hybrids also encouraged sorghum growers to increase irrigation with over a third of present-day acreage watered compared with 15 percent in prehybrid days.

In all, the adoption of new technologies increased crop output per acre over 55 percent between 1950 and 1971.

Livestock labor efficiency also benefited during the two decades. Total hours of labor to produce milk, meat and eggs fell from 1950's 5.5 billion to 2.3 billion in 1971.

For example, poultry and egg production doubled while labor needs in the poultry industry declined more than two-thirds. Meat animal production increased by 50 percent, but labor to produce meat animals was off about one-third.

Farm inputs remained about the same overall during the two decades but the mix changed drastically.

Purchased inputs gained nearly 50 percent in 1950 totals. In the mechanical category, it wasn't just an increase in numbers; machines that could do more work were constantly introduced.

Consider tractors. Tractor numbers

increased over one-third while horsepower more than doubled. While 1950's average tractor had 27 hp., 1971's had 45 hp. Distributed over the farm labor force, each farmworker had 47 hp. at his disposal in 1971, compared to 10 in 1950.

Along with increased tractor power came improvements in other types of machinery. For example, the self-propelled combine sported a cutting edge of 7 feet as the 1950's began. The 1970 models cut up to 25 feet.

In 1954 the introduction of the picker-sheller head permitted the combine to enter the cornfields. In 1970, a good harvest rate was 10 bushels per

minute, picked and shelled, from an eight-row head.

Other purchased inputs that have gone up since 1950 include fertilizer and pesticides, each up five times, and mixed feeds, whose use more than doubled.

The labor input obviously declined drastically and rapidly. It took 15.1 billion hours to produce the 1950 agricultural output. In 1971, man-hours had plunged 57 percent to 6.5 billion.

Cropland harvested declined just 10 percent during the 1950's and remained rather stable through 1970. Cropland harvested rose somewhat during 1971. This year it returned to the level of the past decade. The reduction in farm numbers was nearly offset by the 83-percent expansion in average farm size from 213 to 389 acres.

Agriculture will continue to become more productive but the experts at USDA expect things to slow a bit from the lightning pace of the past two decades.

Comparisons between optimum crop yields and average yields suggest that future national crop production could improve without the introduction of any new technologies.

For example, the best corn farmers are now obtaining yields of 150 to 200 bushels per acre and cotton variety yield tests show yields 50 percent greater than the average farmer is obtaining. National averages stand at 87 bushels for corn and 438 pounds for cotton.

We have been discussing changes during the last two decades but what happened between 1970 and 1971? Farm output per hour of farm labor continued to climb during 1971, gaining 11 percent for crops and 8 percent for livestock over the previous year.

The inputs remained about the same in both 1970 and 1971 but these produced 9 percent more in 1971 than in 1970 due to better than average growing conditions, increased use of available farm resources, especially land, and greater application of improved technology.

ATTN. GARDENERS!

USDA's 1972 Yearbook is a 416-page publication that promises to become a must on every home gardener's reference shelf.

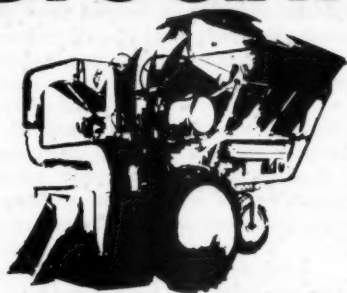
Landscape for Living is packed with all the latest tips on annuals, perennials, lawns, shrubs, herbs, fruits, vegetables, plant propagation, mulching, fertilizing, and composting.

There are also chapters dealing with container gardening, landscaping limited areas, ground covers, minimum care plantings, controlling erosion, brightening neighborhoods, even attracting birds.

One section of the book concerns gardening's role in maintaining environmental quality. USDA experts have authored several chapters on plants as climate changers, ways to ease visual pollution, land planning, rent-a-garden projects, and redesigning downtown shopping areas.

Copies of *Landscape for Living* may be purchased for \$3.50 each from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Breakthrough!



THE COTTON PICKER

As children, John Rust and his brother, Mack, picked cotton by hand. The children often imagined that a machine might end their drudgery.

When he grew up John became an itinerant farm mechanic and began tinkering with developing a spindle cottonpicker. But he was baffled by the problem of removing cotton lint from a spindle barbed enough to twist the line from the boll. He wasn't alone—inventors of cotton harvesters had a century of failure behind them.

Lying in bed one night in the spring of 1927, John Rust recalled how morning dew had made cotton stick to his fingers. Next he remembered how his grandmother always moistened her spindle when spinning cotton.

He jumped from bed, licked a nail, twirled it in absorbent cotton, and discovered that moisture was the key to mechanically picking cotton.

Rust's first harvester used moist smooth wires to remove lint from bolls—all previous models had tried roughened, barbed, or twisted spindles. While cotton harvesting machines have undergone many modifications, Rust's basic idea is still used.

John, joined by his brother, Mack, survived many discouragements with early models but by 1931 they had a unit that could pick a bale a day. By 1936 the Rusts' machine could gather

four-fifths of a bale per hour—40 to 50 times the rate of hand picking.

Although the machine picked up much trash and left waste in rows, nobody doubted the Rusts' machine would work. A demonstration at Stoneville, Miss., in August 1936 gained nationwide attention but set off fears about abolishing jobs during the depression.

At first, the Rusts would only rent machines to farmers who would abolish child labor and pay minimum wages. However, in 1937 the Rust brothers abandoned their leasing plan and offered a two-row self-propelled picker on the open market for \$4,800. In 1942 John Rust and a large commercial company came to an understanding and the device was redesigned and mounted on a tractor.

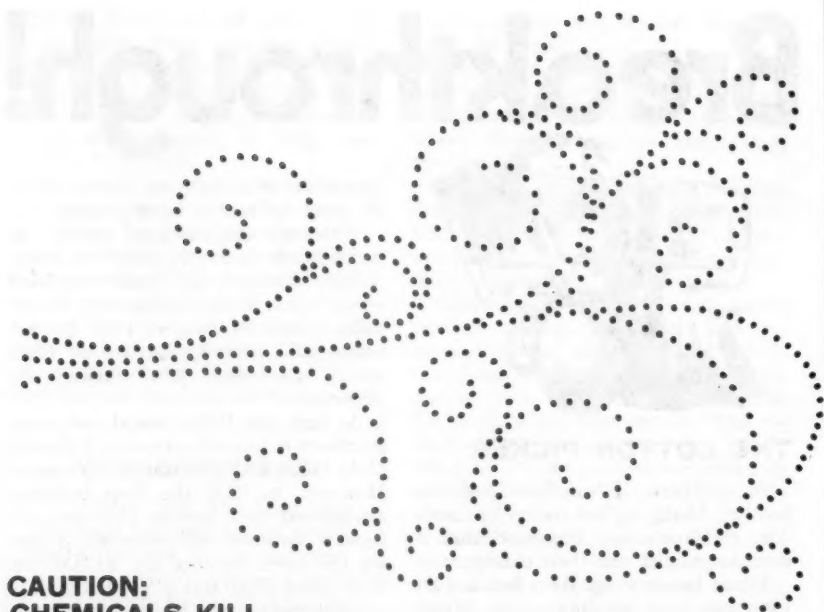
While labor shortages during World War II led to serious considerations of mechanizing the cotton harvest, machine picking did not really catch on till the mid-1950's.

In 1955 around 41,000 mechanical pickers rolled out to harvest the crop, compared with only about 10,000 in 1952. There are nearly 60,000 pickers in operation today.

In two short decades the harvester completely facelifted U.S. cotton production. In 1950, 8 percent of a 10-million-bale crop was machine harvested versus the 98 percent in 1970.

As far as labor went, it took 694 million man-hours to harvest 1950's crop and 35 million to harvest 1970's.

Hand in glove with the mechanical picker went other advances that facilitated mechanization of cotton production. Pre- and post-emergence herbicides, newly designed cultivators, cotton varieties suited to machine harvesting, chemical defoliants to remove leaves before harvest, and improved ginning machines are but a few.



CAUTION: CHEMICALS KILL

Farm accidents. They kill, cripple, and put farmers out of work for weeks. You warn people to be more careful but somehow the injuries keep mounting. USDA wants to do something about it.

This year USDA is running a year-long safety drive aimed at making a drastic cut in farm fatalities and disabling injuries. One of the high priority items in the campaign is telling farmers and farmworkers how to use chemicals safely—and what to do if an accident should occur.

Here are some pointers regarding the most frequently used chemicals:

Anhydrous Ammonia—The boiling point of anhydrous ammonia is 28 degrees below zero. If the liquid comes into contact with any part of the body, it can cause severe burns by freezing as well as by its caustic action and dehydration.

Skin burns can be serious but eye exposure can be even more critical. Severe exposure, if not quickly and properly treated, can result in blindness.

Immediate, effective action is essential in case of an accident in which

a person is sprayed with anhydrous ammonia. Water is the best emergency first aid treatment for ammonia burns. Flush or irrigate the injured area of the skin or the eye with lots of water for at least 15 minutes.

If burns are extensive and a water tank is nearby, get the victim into the water. Do not take the time to remove his clothes; remove them after he is in the water.

Immediately after the first aid treatment with water, get the victim to a doctor.

A warning: Salves, ointments, or oils should not be applied to ammonia burns for at least 24 hours; they will cause deeper burns.

What can you do to prevent such accidents?

—Use good equipment specially designed for handling anhydrous ammonia.

—Keep your equipment in good repair.

—Preplan for emergencies. Know how to treat burns.

—Wear protective clothing.

—Take extra care in filling the tank.
Pesticides—"Use Pesticides Safely" stands out boldly on every container. Unfortunately this warning isn't always effective. In 1969 over 5,700 people were injured in pesticide mishaps, another 26 died (latest available data). These facts may be understated because incidents are reported on a voluntary basis.

Because pesticides are powerful enough to do what they are supposed to do, they are powerful enough to harm you or someone else. Use common sense and follow these basic safety rules:

—Select the proper pesticide.

—Always read the label. It could give you medical information that saves a life.

—Wear clean clothes every day. If recommended on the label, wear proper protective equipment such as mask and rubber gloves.

—Never smoke while using pesticides. Besides the chances of the pesticide being flammable, you might inhale some vapors.

—Wash hands, face, and clothes after using pesticides. Wash hands immediately if any is spilled on them; change clothes after serious spills.

—Mix pesticides outdoors. Open and pour them carefully, mix accurately, and return containers to safe storage immediately.

—Apply pesticides only during calm weather—never when the wind is blowing.

—Never work alone when mixing or applying the more toxic pesticides.

—Keep children, pets, and others out of mixing and application areas. Over two-thirds of pesticide-related mishaps happen to children under 5.

—Learn general symptoms of pesticide poisoning by reading the labels. Get medical help immediately—seconds may cost a life.

There are no compromises when it comes to handling the many dangerous chemicals on every farm. Be careful. The saddest part about farm chemical accidents is that they can be prevented with a little common sense.

"HE WHO HESITATES . . ."

When it comes to washing off pesticide spills on the human body, every minute counts, according to Dr. Howard Maibach of the University of California Medical School.

Dr. Maibach has been doing research into the rate of penetration of pesticides through the human skin.

In Dr. Maibach's tests, parathion was absorbed into the forearm at the following rates: 2 percent of the total amount of pesticide in 1 minute; 5 percent in 15 minutes; 8 percent in 1 hour; and 16 percent in 8 hours.

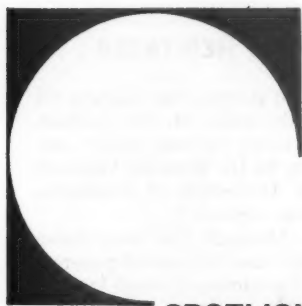
Absorption rates did not vary with the potency of pesticides—but the total amount of chemical absorbed did.

For example, a minute's delay in washing off a dose of 2,000 micrograms resulted in a total absorption of 40 micrograms. When the dose was only 4 micrograms, total absorption in the same time was only 0.08 microgram.

Micrograms, while they are very small units of measure (one-millionth of a gram), are not small when it comes to such toxic pesticides as parathion.

A lethal dose of parathion for a person weighing about 155 pounds is put at close to 50,000 micrograms. And though it's not likely a farmworker would get such a dose at a single shot, small repeated dosages are more or less additive because the nervous system lacks time for repair.

The research indicated that hats are a must when working with these chemicals. Penetration of pesticides on the forehead was nearly seven times faster than on the forearm; penetration on the scalp was four times that of the forearm.



SPOTLIGHT ON ARIZONA

"Irrigated agriculture has been important in Arizona since about 600 A.D.," says Horace M. Mayes, statistician in charge of the Grand Canyon State.

"More than a millennium ago, the Hohokam Indians were digging out irrigation canals with stone hoes and axes. Some of those early canals are still visible and experts say they are as well engineered as our modern irrigation systems."

Arizona's agriculture depends heavily on irrigation. In the State's arid climate, supplemental water is essential for raising nearly all of the \$300 million worth of crops produced yearly. The livestock sector, which contributed close to \$400 million in cash receipts last year, also rests on a base of irrigated alfalfa, sorghum, feed wheat, and barley.

"Irrigated crop production is concentrated in the southern half of the State. The northern half is range, with scattered crop fields and small orchards," Mayes says.

Arizona is a large supplier to the Nation's vegetable bin. Broccoli, cabbage, cauliflower, carrots, lettuce, dry onions, cantaloups, watermelons, and honeydew melons are all grown.

It was the fourth leading State in harvested acreage, production, and value of sales of fresh market vegetables in 1971 when fresh vegetables were worth \$89.2 million, a jump of \$14 million from the previous year.

Arizona farmers are also supplying a lot of Vitamin C. They grow over

50,000 acres of citrus fruits, with nearly half of them oranges. Next in importance are lemons with some 14,500 acres.

"In 1970/71, we made about \$32 million from our 5.8 million citrus trees," Mayes comments. "We had a bad freeze back in January 1971, so our production was way under 1970."

Venturous farmers in Arizona, in their search for new crops, have planted 8,500 acres to pecans and 4,400 acres of deciduous fruits since 1965.

The largest commercial pecan orchards are in Pima, Pinal, and Maricopa counties. New trees coming into production, coupled with the better producing mature trees, brought output to over 850,000 pounds in 1971, up from the 150,000 pounds 2 years earlier.

Three-fourths of the commercial orchards of deciduous fruits—apricots, nectarines, peaches, and plums—are located southeast of Phoenix in the desert. The desert growing season enables the fruit to mature by late spring and be early to market.

Arizona's leading field crop is cotton. Last year, farmers produced around 505,000 bales on 285,000 acres, with a cash value of \$74.9 million. Arizona ranks first in the amount of American Pima cotton produced with a harvest last season of 45,000 bales worth \$9.7 million.

Following cotton in acreage is grain sorghum. Arizona is not one of the leading national producers of sorghum, but a hefty 73 bushels per acre puts it right near the top in yield. Arizona farmers produced 12.7 million

bushels of sorghum from 174,000 acres with a cash value of \$16.7 million in 1971.

Another important crop is alfalfa hay. Although they only grow about 1.2 million tons per year, Arizona farmers harvest 5 to 6 tons per acre—almost twice the national average. And this doesn't even include the green crop.

Arizona produced a 1971 barley crop of 217,060 tons. In the last 3 years, the State has lead the Nation in yield per acre with an average of 76 bushels.

In the late sixties, Arizona farmers were introduced to some new varieties of wheat developed in Mexico to master the desert.

The acreage of wheat harvested for grain jumped from 73,000 acres in 1969 to 150,000 in 1970.

"Last year," Mayes says, "we harvested 173,000 acres, produced 352,920 tons, and farmers grossed \$20.2 million from wheat."

Hay, sorghum, feed wheat, and barley are grown to support the State's big but still expanding livestock industry worth \$395 million last year.

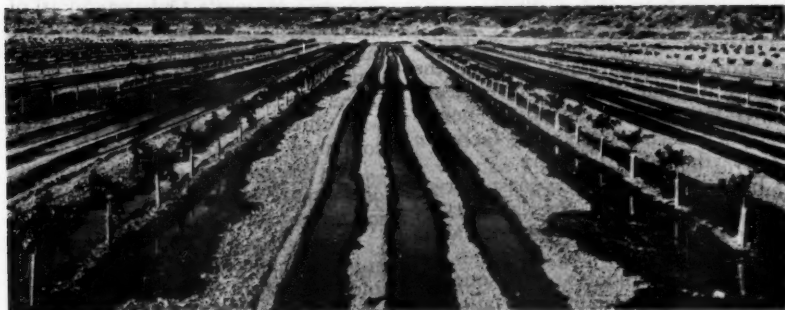
Arizona has felt the growing demand for beef and has a feedlot capacity for 630,000 head, with capacity growing annually.

On January 1 of this year, there were 539,000 cattle on feed in the State. "That makes us eighth in the Nation," Mayes notes. "All told, we have about \$246 million worth of cattle and calves on our farms and ranches throughout the State."

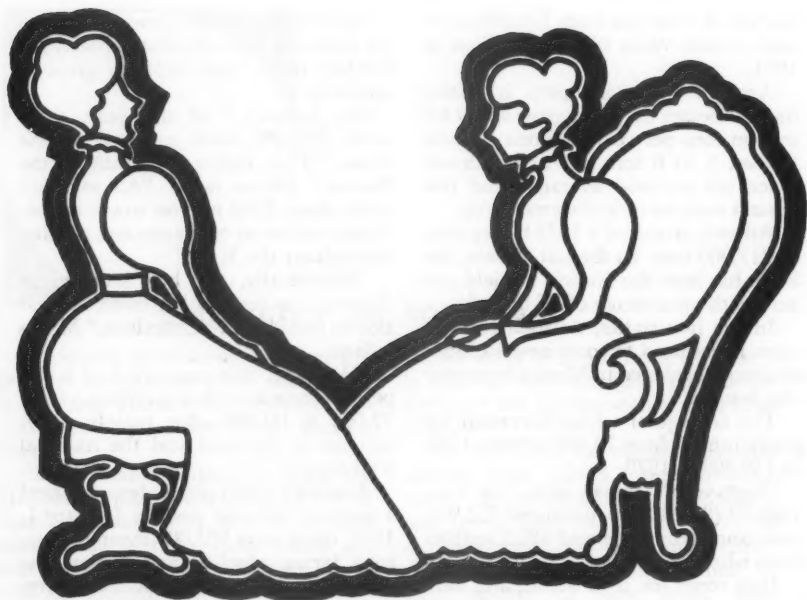
"Historically, the hog industry in Arizona has been rather small in relation to total livestock numbers," Mayes tells us.

"However, this year we had a 25-percent increase in hog numbers—from 72,000 to 90,000—due mainly to an increase in demand and the national feed supply."

Arizona's sheep population declined 1 percent last year and on January 1, 1972, there were 503,000 sheep on Arizona farms, ranches, and Indian reservations. Non-Indian owned sheep accounted for only about 37 percent of the total. This includes 97,000 stock sheep and 91,000 on feed.



Irrigation is crucial to Arizona's agriculture. Above: One farmer gets double his water's worth by irrigating lettuce planted between young orange trees. Left: There were more than half a million sheep in Arizona last January 1. Here some of them graze on an allotment in Apache National Forest.



OLD WIVES' TALES ABOUT DAIRY PRODUCTS

Old wives—and young ones, too—subscribe to a number of fanciful tales regarding dairy products. Perhaps the biggest misconception involves dairy foods' fat content—with many homemakers believing them to be far more "fatty" than they truly are.

In a recent coast-to-coast survey conducted by SRS' Special Surveys Branch, more than 2,200 homemakers were queried on their attitudes towards dairy products and nondairy competitors—especially in relation to health and diet.

Homemakers were asked to give an estimate of the fat content of five important dairy items: regular whole and low-fat fluid milk, American and cottage cheese, and ice cream. There were 13 fat categories for respondents to pick from—ranging from "none" to "100 percent fat."

Few and far between were the homemakers who could correctly match the food with the fat.

A case in point: Only one in 10 of the homemakers correctly rated whole milk's fat content in the "up to 5 percent" category on the SRS questionnaire. All the rest guessed too high—with three in 10 even thinking milk contained 50 percent or more fat.

The homemakers were equally wide of the mark in judging the fattiness of ice cream and American cheese.

Fewer than a tenth of the respondents correctly picked the "between 10 and 19 percent fat" category for ice cream. One in 10 scored the fat content too low but almost 60 percent of the homemakers believed ice cream to be more than half fat.

The fat content of American cheese, which fell into the category "between 30 and 39 percent fat" was also correctly stated by only one in 10 people. The others were split almost equally between those who underestimated and those who overestimated.

For cottage cheese, two in 10 homemakers pegged its fat content correctly

as "up to 5 percent." Most of the others overestimated, three in 10 by a sizable amount.

The respondents did best of all when it came to gaging the fat content of low fat milk—perhaps because this item's fat content is often displayed prominently on the label.

About half those interviewed correctly placed low fat milk in the "up to 5 percent fat" category. A tenth of the homemakers thought it contained no fat at all. Only two in 10 believed it to contain 10 percent or more fat.

Another old wives' tale believed about dairy products . . .

—Homemakers tended to score butter higher in calories and fat than its big nondairy competitor, margarine. At the same time, they gave butter better scores than margarine on the basis of calcium, protein, and vitamin content.

The truth of the matter, according to nutritionists in USDA, is that like quantities of butter and margarine contain the same amount of fat, calories, calcium, proteins, and vitamins. The two foods are nutritional equals—but apparently homemakers don't view them that way.

PRODUCT IMAGES

The SRS study also tested the images of seven dairy products versus five other foods on the basis of popularity, practicality, and nutritional values, as well as some health and dietary considerations.

The 2,200 homemakers were asked to select from a list of descriptive phrases which attributes they associated with the 12 foods.

The seven dairy items involved were regular whole and low fat fluid milks, table cream, ice cream, ice milk, butter, and American cheese. The other five foods included two imitation dairy products—margarine and nondairy powdered creamer—and three "controls"—bread, eggs, and orange juice—to aid in analyzing the data.

Here's how the homemakers viewed the various products:

Popularity—Winner of this contest was ice cream, judging by homemakers' testimony that all age groups like its taste. Among adults, it held a narrow edge over orange juice—54 percent of the homemakers selected "most adults like the taste" for ice cream, while 48 percent chose that statement for orange juice. American cheese, bread, butter, and eggs followed closely. Ice milk and powdered creamer placed near the bottom but low fat milk scored lowest on taste.

Practicality—In this group, nondairy powdered creamers claimed the top spot on "keeps well," although table cream was the only product that really got a poor score on this attribute. Margarine came out best as being a "good value for the money" and "low cost per serving." Table cream and butter both received substantial negative ratings on these counts.

Food values—Eggs led on "high in protein," followed by American cheese and regular whole milk. None of the other products was associated with high protein content by more than two in 10 of the homemakers.

Almost six in 10 credited regular whole milk as being an excellent source of calcium. No other product was selected nearly as often.

Orange juice led on "high in vitamins" with whole milk placing second. None of the 12 products was credited with being high in iron by more than two in 10 homemakers.

Health and dietary considerations—On "low in calories," low fat fluid milk and ice milk were viewed quite favorably but the other dairy products were generally thought to have a high caloric content.

Low fat milk was considered to be low in cholesterol by more of the homemakers than any other product, although only three in 10 actually made this statement. Margarine was second.

Butter, eggs, and cream were judged to be high in cholesterol by four in 10 of those interviewed.

aoutlook

Digested from outlook reports of the Economic Research Service.
Forecasts based on information available through August 1, 1972

SOVIET GRAIN DEAL . . . The recent \$750 million U.S.—U.S.S.R. grain deal makes the Soviet Union our second most important customer for grain, behind Japan. At least \$200 million of the new deal will be bought during the year beginning August 1. The annual purchase of the 3-year agreement will increase grain exports 17% over recent years. Up to \$500 million in credit will be extended by CCC at any one time at going interest rates with the U.S.S.R. to repay the loan in 3 years.

SOYBEAN CARRYOVERS . . . Soybean carryover on September 1 will probably total a scant 60 million bushels and the going use rate of 100 million bushels per month will probably leave little slack to cover any lateness in the 1972 harvest. Supplies on September 1, 1971 started at 1,268 million bushels, making disappearance during 1971/72 somewhere around 1.2 billion bushels, 4% under the previous year's disappearance.

BEAN PRICES are expected to continue strong. They advanced from \$2.84 last November to \$3.35 this May, around a 10% jump, averaging a little over \$3 per bushel for the whole period.

CRUSH OFF . . . Soybean crushers are using around 61 million bushels a month, off from the 1970/71 record 64 million bushels. The total crush for the year, 720 million bushels, fell 5% from last year's record high because of high prices, skimpy supplies, and an accumulated stock of soybean oil totaling over 1 billion pounds.

SUSPENDED LIMITATIONS . . . The Government suspended meat import limitations early in July to attract bigger supplies, especially beef. However, it takes time to adjust shipping schedules and world supplies of beef are low in relation to demand. Imports during 1972 will be up but just how much is uncertain at this time. Although countries that meet our health standards have a little

more beef to export than last year, the European Community is buying more and some foreign beef producers are holding animals back from slaughter for herd breeding. In 1971 the United States imported 1.13 billion pounds of meat subject to quota.

LOTS LESS LARD . . . Lard production for the year ending September 30 is expected to total around 1.7 billion pounds, off one-fifth from last year. The drop reflects two things: reduced hog slaughter and less lard per hog. Lard yield per hog averaged around 19 pounds, compared with 21½ pounds in 1970/71.

INEDIBLE TALLOW . . . Inedible tallow and grease production during the year ending September 30 is estimated at 5.2 billion pounds, just a bit below the previous year. Cattle slaughter was about the same as last year but hog slaughter was down and high meat prices also encouraged processors to trim carcasses less.

TOTAL CIGARETTE OUTPUT for the year 1971/72 is estimated at around 30 billion packs, a new record high and up 2% from the previous peak last year. The total includes 1.7 billion packs for export. During the 11 months ending May 1972 exports rose about one-sixth, reflecting a continuing upward trend in world cigarette consumption.

MORE SMOKERS are smoking more cigarettes. Cigarettes used in July 1971/June 1972 hit 28.3 billion packs, 4% above a year earlier. Greater per capita use accounted for part of the gain, since the adult population rose only 1½% in that time. Gains in cigarette consumption are expected to increase in July-December 1972 as more persons reach 18 years of age.

LESS TOBACCO . . . Despite record numbers of cigarettes lit last year, tobacco use per cigarette continues to slip, mainly due to less tobacco in filter cigarettes. Use for the year ending June 30, 1972 probably was about the same as the previous season's 1,251 million pounds.

HE WHO SMOKES, PAYS . . . Retail prices for cigarettes moved higher last year. Since July 1971 at least 13 States have increased their tax rates. So during May 1972 smokers were paying 7% more for a pack of cigarettes than a year earlier.

LAND VALUES . . . Farm real estate values increased 8% during the year ending March 1, 1972. Values in all sections of the Nation rose, ranging from a 10% increase in the Appalachian and Delta States to a 5% hike in the Northern Plains. Average value per acre was \$217, compared with \$201 on March 1, 1971.

LAND IN DEMAND . . . Farm real estate men indicate that inquiries about land increased from 1971 to 1972. Much of this was caused by a boost in available loanable funds and lower interest rates. On the supply side, the number of farms offered for sale remained essentially unchanged.

ENLARGED FARMS . . . Of all tracts sold 56% were added to units already owned or leased by a farm operator. And nearly 40% of the properties purchased for farm enlargement were previously operated as separate, complete farms.

STATISTICAL BAROMETER

Item	1970	1971	1972—latest available data	
Prices received by farmers (1967 = 100)	100	113	127	July
Prices paid, interest, taxes, wage rates (1967 = 100)	114	120	127	July
Ratio ¹ (1967 = 100)	96	94	100	July
Consumer price index:				
All items (1967 = 100)	116	121	125	June
Food (1967 = 100)	115	118	123	June
Disposable personal income (\$ bil.)	687.8	741.3	782.9	(²)
Expenditures for food (\$ bil.)	114.0	118.3	123.4	(²)
Share of income spent for food (percent)	16.6	16.0	15.7	(²)
Farm food market basket: ²				
Retail cost (\$)	1,223	1,244	1,300	June
Farm value (\$)	476	477	528	June
Farmer's share of retail cost (percent)	39	38	41	June
Agricultural exports (\$ bil.)	7.2	7.7	0.7	June
Agricultural imports (\$ bil.)	5.7	5.8	0.5	June
Realized gross farm income (\$ bil.)	57.9	60.1	64.8	(³)
Production expenses (\$ bil.)	41.1	44.0	46.5	(³)
Realized net farm income (\$ bil.)	16.8	16.1	18.3	(³)

¹ Ratio of index of prices received by farmers to index of prices paid, interest, taxes and farm wage rates.

² Average quantities per family and single person households bought by wage and clerical workers, 1960-61, based on Bureau of Labor Statistics figures.

³ Annual rate, seasonally adjusted, second quarter.



WHITE CORN AND SRS

Until last year white corn growers were usually in the dark at market time. No one knew the size of the crop or what the demand was.

Then, at the request of growers and processors alike, SRS began issuing production estimates for the 10 major white corn States. Ranked by production in 1971, they are: Kentucky, Illinois, Tennessee, Missouri, Kansas, Indiana, Texas, Iowa, Nebraska, and Ohio.

Until 1971 white corn growers geared production plans by a 1946 survey in 18 States which showed 12 percent of total corn production was represented by the white varieties—used in breakfast cereals, meal and hominy, snack foods, sirup, starch, and such.

During the 1950's and 1960's, the

lack of current information was reflected by sharp ups and downs in prices. To take some of the hazard out of the business, many growers resorted to production contracts with processors. Others continued to sell the crop on the open market—but they usually hedged by combining it with other enterprises, especially yellow corn.

SRS' 1971 estimate revealed 81.3 million bushels of white corn grown in the 10 States—about 2 percent of their corn total. Kentucky was far and away the leading State, raising a fourth of the 10-State total.

White corn usually sells for a few cents a bushel more than yellow corn—and sometimes the price differential is pretty substantial.

For example, in late May a year ago white corn growers were glowing over the \$1.95 to \$2.05-a-bushel prices they were getting for No. 2 white corn in Kansas City. That was fully 50 cents a bushel over the price for yellow corn. Late this May, though, yellow corn was quoted at \$1.31 to \$1.34 a bushel, leading white corn by a nickel.

The low prices this spring reflect what may have been a whopping white corn crop in 1971—though that's purely speculation since there weren't any SRS production estimates before 1971.

But prices during the rest of 1972 may move up because growers in the 10 States planted only 450,000 acres of white corn in 1972, 40 percent of last year's 1.1 million-acre total.

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